

## **Social climate in the classroom**

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*School climate is much like air we breathe – it tends to go unnoticed until something is seriously wrong. The concern for the climate or atmosphere of the school and its effect on the student and the learning environment, has been a concern of the educational community for more than a century.*

*H. Jerome Freiberg*

People are social beings who enter the world of other people as biological beings who then become personalities. Within socialization, through continuous interaction with their surroundings they acquire a number of social mechanisms allowing them to cope with the challenges of the environment and assume various life roles which they internalize and impart to their successors.

One of the determining factors in this process is the social milieu and natural environment. People interact with their environment at three levels. The first “face-to-face” level is represented by personal contacts: in the family setting, with friends, at school and at work. It is the *micro-environment*. A broader level – *mezzo-environment* is the local environment, the place of residence. The last level is *macro-environment* – including broad social impacts. Stimuli of the *micro-environment* are of the highest intensity, frequency and of the longest duration, the influence of the *mezzo-environment* and *macro-environment* is more mediated and its frequency and intensity is lower.

The relation between the human being and environment has a reciprocal effect. People are shaped by the environment and at the same time they shape the environment for themselves, their coevals and successors.

Learning and behaviour of students is not only a matter of the respective individual. It is influenced by their micro-social environment (environment of a particular school, particular educational staff, particular classroom and a group of coevals about whose opinion they care). School environment, climate and atmosphere have a substantial impact on the development of an individual. School climate is closely connected with the efficiency of the school, attitudes towards the school correlate with socioeconomic and performance-related variables of the students.

School environment may have different names: climate, atmosphere, culture, milieu, ethos, philosophy, spirit, well-being, school soundness.

School and classroom climate is continuously shaped and maintained by interactions and communication between people at school and represents a long-lasting social and emotional attitudes of students in the classroom that is formed and experienced by teachers and students in interaction. (Lašek, 2001)

Social climate of the school may be studied by different approaches. The current approaches to examination of this phenomenon include:

*Sociometric approach:* The object of study is the class as a social group, rather than the teacher.

*Organizational-sociologic approach:* The object of study is the class as an organizational unit and the teacher as a manager.

*Interactive approach:* The study is focussed on interactions between the teacher and students in the course of a teaching unit.

*Pedagogical-psychological approach:* The object of study is the class and the teacher, cooperation in the class, cooperative learning in small groups.

*School-ethnographic approach:* The object of study is the class, teachers and the entire natural life of the school.

*Developmental-psychological approach:* The object of study is the student as the personality and the class as the social environment where the personality should develop.

*Socio-psychological and environmental approach:* The object of study is the class perceived as the setting for learning, students of the given class and the teacher who teaches there (the current and preferred form of the climate).

R.H. Moos (1981,1991), author of the method of study of classroom environment most frequently used in our country and of the CES questionnaire (Classroom Environment Scale, 1973,1974 and Fraser’s and Fischer’s revision 1986, which we also used – see below), dealt with such issues as what are the determinants of the climate and what constitutes a social climate. Moos specified three basic dimensions of significant aspects of the environment that contribute to development of the climate:

- *Relationship dimensions*
- *Personal development dimensions*
- *System maintenance and system change dimensions.*

*Relationship dimensions* express the extent of interpersonal relations and the quality of attachments, extent of cooperation at the level of interpersonal relations, attractiveness of the group for its members, mutual cooperation, social support and the possibility to manifest feelings and opinions.

*Personal development dimensions* express internal processes relating to the conditions of performance- and value-related orientation of an individual, autonomy of members of the group and their development, possibilities of independent decision making and acting, conditions for discussion and communication of information within the group, tolerance towards negative manifestations of members of the group.

*System maintenance and system change dimensions* relate to organization and management of the group, the implemented system of control, structure, transparency and openness of the group to changes.

According to Moose, these three dimensions occur in all groups and characterize their social climate and atmosphere. There are differences between individual groups in terms of the family setting, class and work group. These differences are shown in Table 1.

**Table 1 Dimensions of the social climate in the class, at work and in the family setting. (Moos, 1991)**

<b>Type of environment</b>	<b>Social climate dimensions</b>		
	<i>relationship</i>	<i>personal development</i>	<i>system-related</i>
<i>classroom</i>	relationship involvement feeling of belonging teacher support	task orientation competitiveness	organization transparency teacher’s management innovation
<i>work</i>	relationship involvement cohesion of the team support provided by superiors	autonomy task orientation work pressure	transparency management innovation physical comfort

<i>family</i>	cohesion manifestation of emotions conflicts	independence performance intellectual- cultural active – relaxation moral – religious	organization management
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The research we carried out at the secondary technical school in Hořovice during March 2007 deals with six elements of the social climate: teacher's help to students, students' task orientation, relations between students in the classroom, students' involvement in the teaching-learning process, order and organization in the classroom and rule clarity.

Involved in the research were in total 96 students (52 girls and 44 boys) from 4 classes. The target group comprised students of 1<sup>st</sup> -3<sup>rd</sup> grades of the secondary school, age range 15 - 18 years.

The research was carried out using the CES (Classroom Environment Scale) questionnaire.

The CES questionnaire was designed in the USA at the beginning of the seventies and until now has undergone an interesting development. The author of the original version is the psychologist E.J. Trickett and psychiatrist-physician R.H. Moos. Originally, the questionnaire included 242 questions measuring 13 variables. However, this form of the questionnaire was too extensive for practical use at school. Therefore, the Australian B.J. Fraser developed an abridged version that was subsequently translated into Czech by J. Lašek and J. Mareš. The questionnaire has two forms - form A reflecting the actual climate, and form P characterizing the preferred state. The questionnaire can be used for:

- description of the climate in a particular classroom as perceived by the students
- comparison of students' and teachers' perception of the classroom climate
- comparison of the students' preferences (CES-P) and the current, actual state (CES-A)
- identification of differences between teachers teaching in the same class
- identification of differences between traditional and alternative schools
- examination of the influence of the climate on the personality of the teacher and students, educational results

The research was carried out using the A form of the CES questionnaire. This form shows the current (actual) state of the social climate in the classroom. The abridged version of the CES questionnaire in English contains 24 questions that measure six variables. It is conceived in such a way to avoid direct succession of questions. The Czech version of the CES questionnaire contains 23 questions (question no.20 that was not classified by the factor analysis in any of the factors was deleted).

**Table 2 Characteristics of the Czech version of CES**

Name of variable	No. of questions	reliability Cronbach's alpha	minimum possible score	maximum possible score
1. students' involvement in the schoolwork	3, 9, 15, 20	0.66	4	12
2. students' affiliation	1, 4, 10, 16, 17	0.56	5	15
3. teacher support to students	2, 5, 8, 14	0.54	4	12

4. students' task orientation	7, 12, 13, 21	0.46	4	12
5. order and organization in the classroom	11, 19, 22	0.52	3	9
6. rule clarity	6, 18, 23	0.49	3	9
the whole questionnaire		0.73		

**Research results**

For each class we get *six variables* signalling whether the classroom climate (from the viewpoint of students) is rather favourable or unfavourable. Typical of the *positive climate* in the classroom are emotional attachments among students, their high involvement in the schoolwork, high rule clarity and the perceived high teacher's help and support. *Negatively perceived climate* results from high competitiveness, high task orientation and intensive control of students by the teacher. The results are given in the percentile norms in individual variables.

**1. Teacher support of students**

Questions in the CES questionnaire:

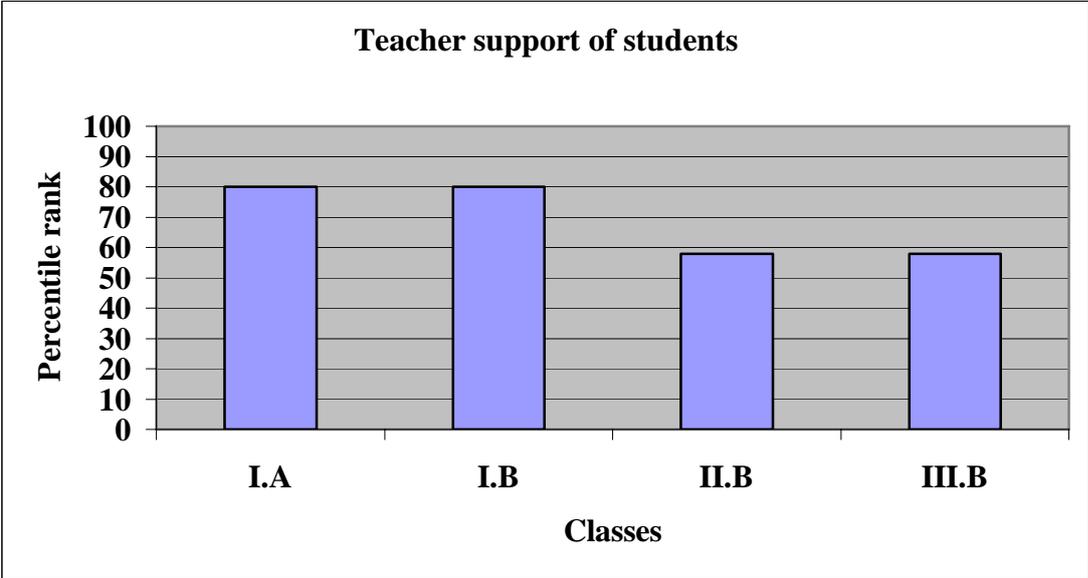
Question no.3. This teacher rarely discusses with us things in which we would need advice or help.

Question no.9. This teacher is interested in getting to know us better than other teachers.

Question no.15. This teacher treats us friendly rather than authoritatively.

Question no.20. This teacher is able to actually help students who have certain problems.

**Graph 1 Factor 1 – Teacher support of students**



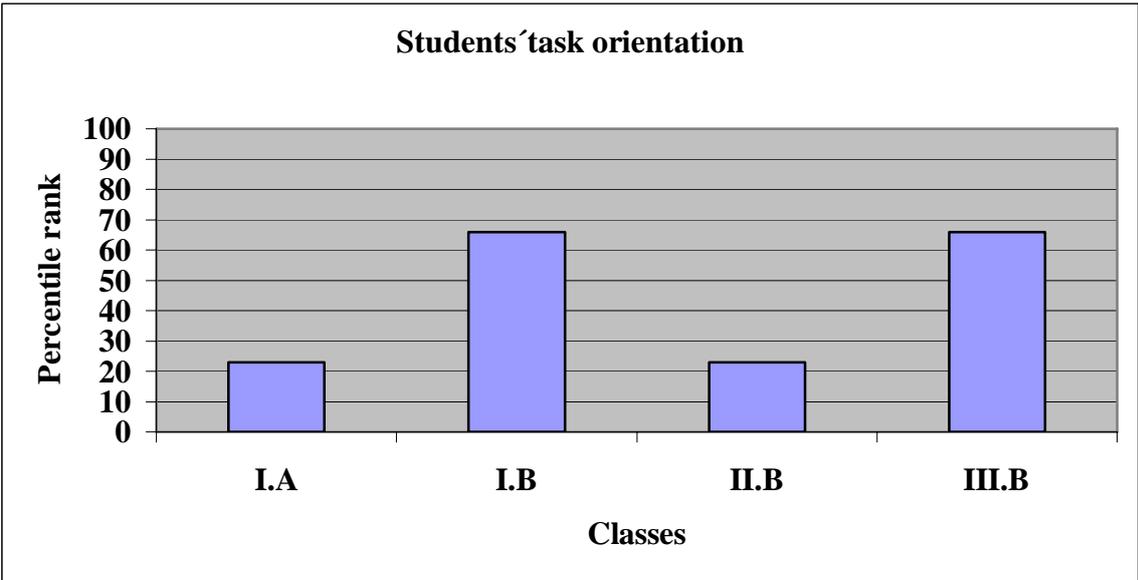
In this part, students assessed the support of class teacher. As shown in Graph 1, the variable values of *teacher support* are favourable in all classrooms because their values

exceed 50. Even the values of I.A, I.B classes the value of the percentile order was 80 which means that they are among 20% of the best classrooms. In terms of evaluation of the class teacher’s work this result is above average and therefore it can be concluded that students are highly satisfied with their class teacher.

**2. Students’ task orientation**

- Questions in the CES questionnaire :
- Question no.1 Students in our class concentrate relatively a lot of efforts and energy on the schoolwork.
  - Question no.4 Students in our class spend more time talking about out-of-school matters than discussing school and learning.
  - Question no.10 Students in our class work hard during lessons.
  - Question no.16 Students in our class are not very active.
  - Question no.17 Students in our class may even dawdle.

**Graph 2 Factor 2 – Students’ task orientation**



Another of the six variables assessed by students was *task orientation*. The results are the following: two classes – I.B, III.B reached the score of 66, i.e. they are among 34% of the best classes of the secondary technical school concerned, while classes I.A, II.B reached the same value of 23 which characterizes a strongly below standard situation. Teachers teaching in this class should focus more on motivation of students.

**3. Students’ affiliation**

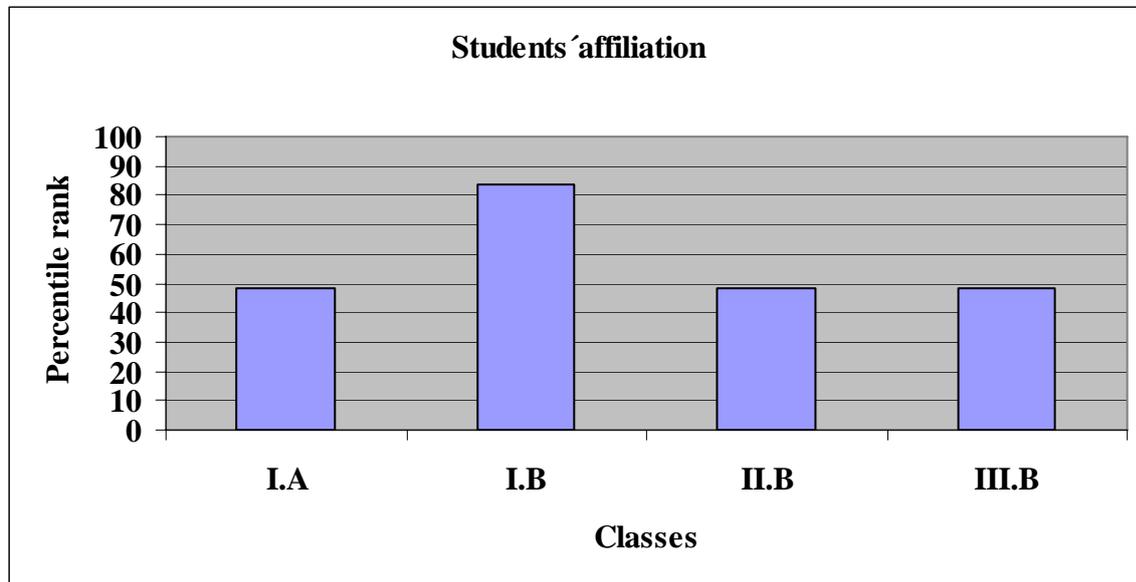
- Questions in the CES questionnaire :
- Question no.2 Students in our class know each other well.

Question no.5 Our class is very well organized.

Question no.8 Students in our class are not willing to get to know each other.

Question no.14 Most students in our class are friends.

### Graph 3 Factor 3 – Students' affiliation



As shown by the following Graph 3, three of the four classes reached in the assessment of the *affiliation* variable the value of 48 which is a slightly below standard value. Only in class I.B the variable value was 84, i.e. the class is among 16% of the best classes, relations in this class are very satisfactory and probability of big conflicts is very low here. On the contrary, in other classes it is necessary to promote mutual relations among students. There are classes that are split into several groups, couples or loners who do not communicate much. Therefore it would be suitable to promote mutual communication among the students. The teacher may for instance include in the instruction more teamwork in groups or couples, change students in the groups and thus make them communicate with each other or let them prepare different projects with a subsequent short presentation.

#### 4. Involvement in the teaching-learning process

Questions in the CES questionnaire :

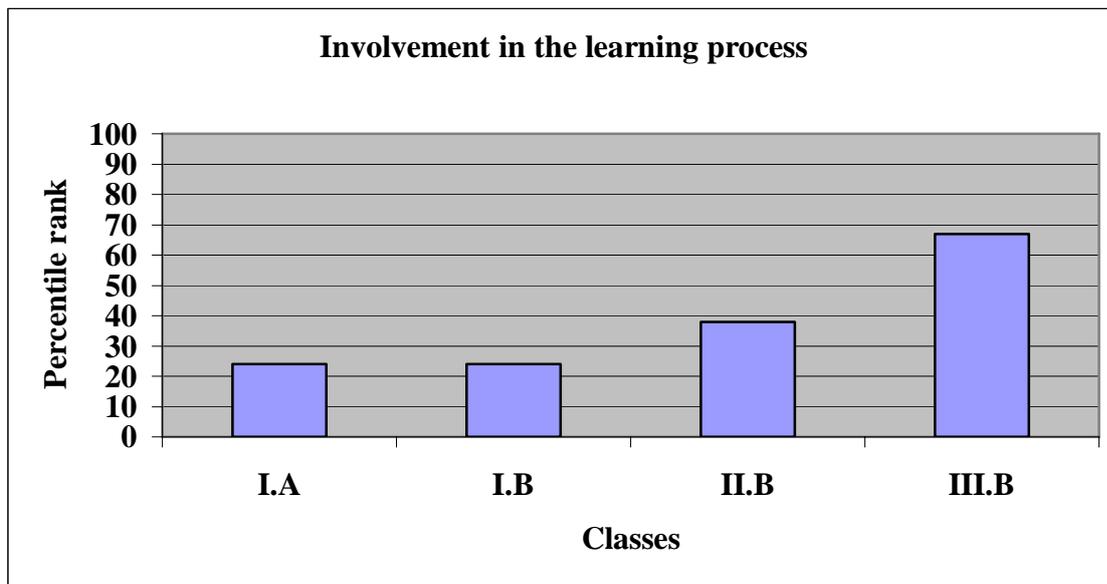
Question no.7 Students daydream a lot in our class.

Question no.12 The rules in our class are often changing and we do not know what is or is not allowed.

Question no.13 Students in our class are not interested in the teaching-learning process and can hardly wait for the end of the lesson.

Question no.21 Our classroom is an entertaining place rather than a place where one would learn something.

**Graph 4 Factor 4 – Involvement in the teaching-learning process**



Another variable of the CES questionnaire characterizes the students' involvement in the teaching-learning process (viz. Graph 4). The values of variables in individual classes are the following: classes I.A, I.B – 24 each, II.B – 38 and III.B – 67. The results show that the situation is satisfactory only in class III.B that has an above average result and is among 33% of the best classes of the secondary technical school. This fact may be caused also by students' age and curricula as students in higher grades gradually focus on specialized subjects important for their discipline. Lack of students' interest in instruction in the lower grades may be caused also by adolescence and general lack of interest in education or by changed requirements put on students who come from the basic school. In some students the cause may be also incorrect choice of the school and lack of interest in the given specialization. The teacher should promote students' motivation by including in the curricula more news, current examples and issues. Teaching of specialized subjects should be supplemented with a sufficient number of educational visits and practical training to allow students to obtain practical experience.

## **5. Order and organization in the classroom**

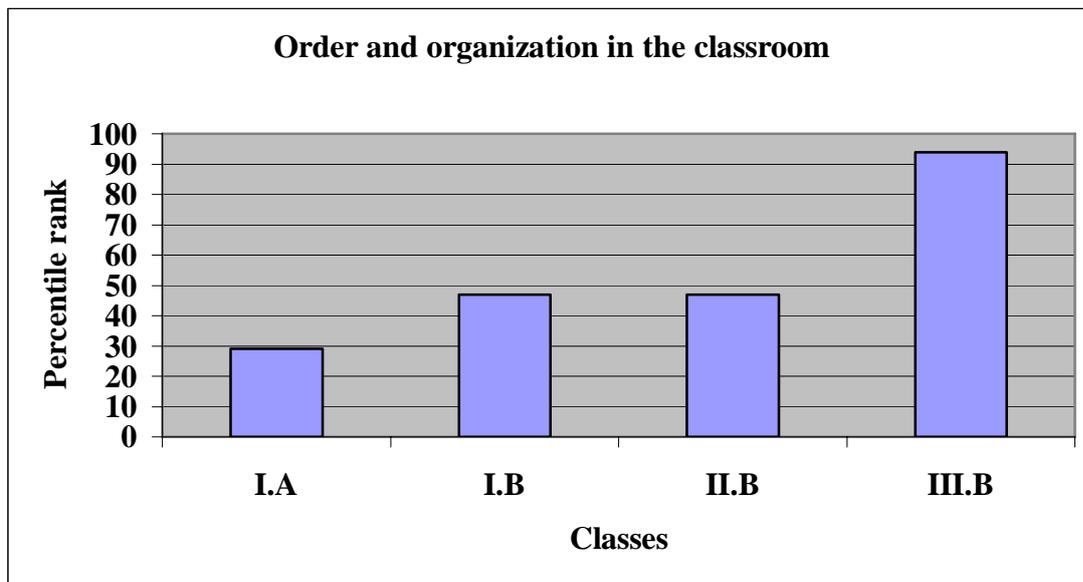
Questions in the CES questionnaire :

Question no.11 In our class the students are almost always quiet.

Question no.19 Most of the class show attentive interest during lessons.

Question no.22 Our class is often quite noisy during lessons.

**Graph 5 Factor 5 – Order and organization in the classroom**



As shown by the following Graph 5, the value of the order and organization variable was in three of the four classes below average – I.A – 29, I.B and II.B – 47. Only in class III.B the value of the variable reached 94 which is above average. This result documents the fact that students most probably do not show much attentive interest during lessons. In addition, the class may be too noisy for students who are interested in the instruction. Teachers should focus on establishment of certain rules and order and organization in the mentioned classes with a below average result.

## **6. Rule clarity**

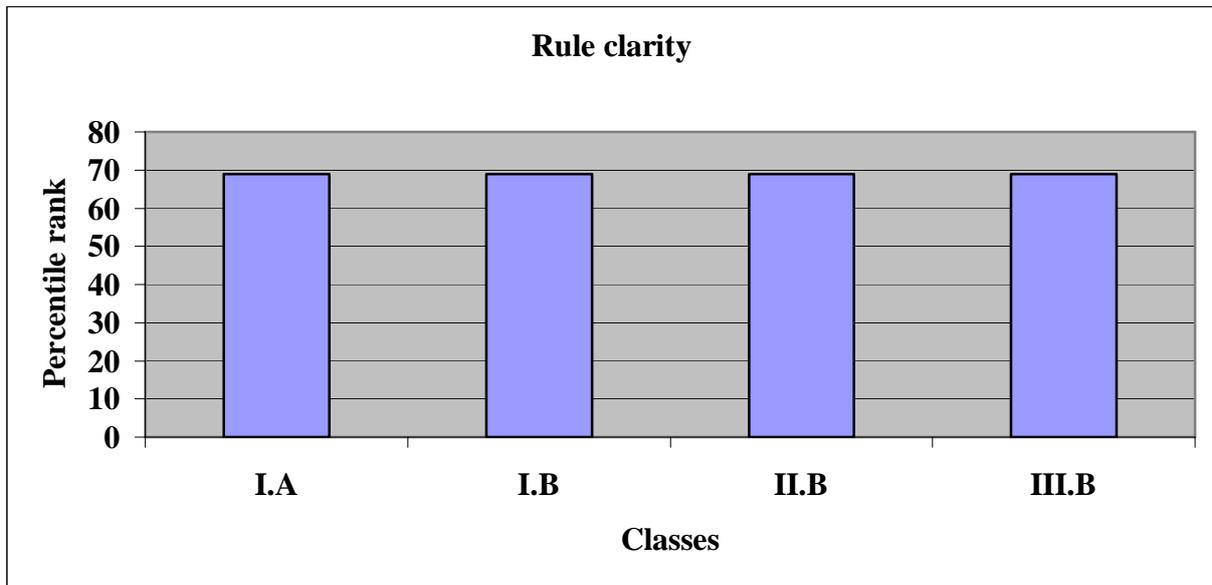
Questions in the CES questionnaire :

Question no.6 There is a clear set of rules the students in our class have to follow during lessons (during oral examination and written tests, etc.)

Question no.18 The teacher has explained the consequences for rule-breaking.

Question no.23 This teacher has clearly stated under what conditions we will be on good terms with him/ her.

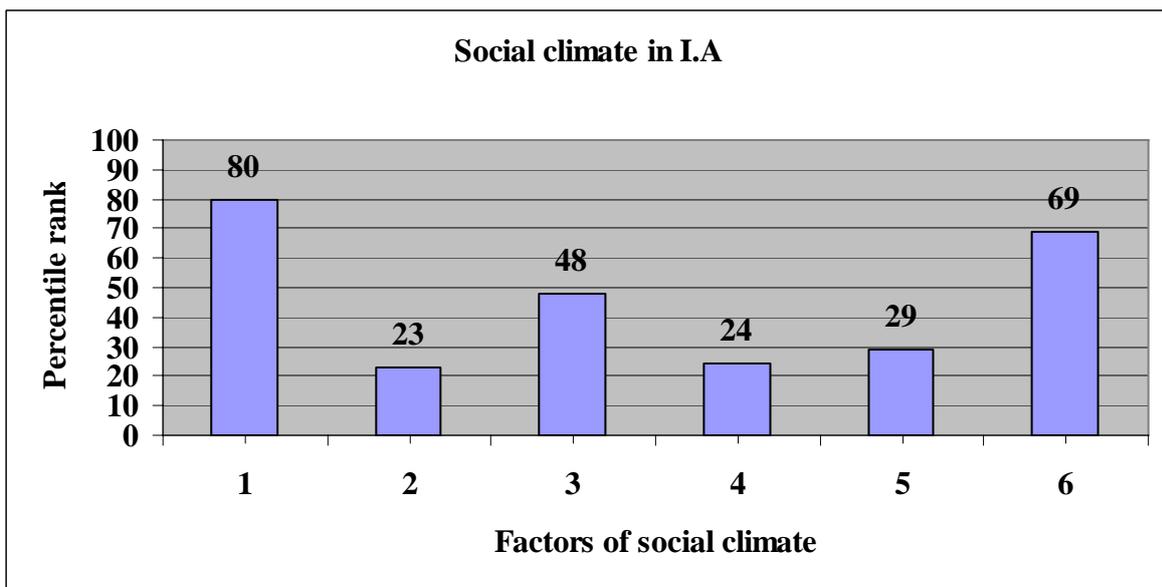
**Graph 6 Factor 6 – Rule clarity**

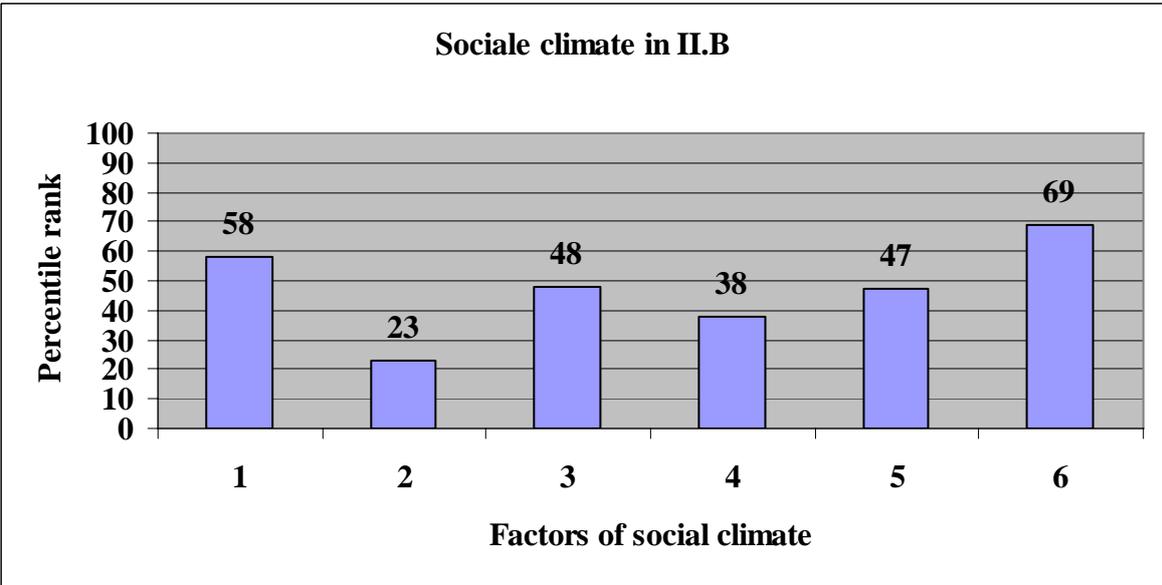
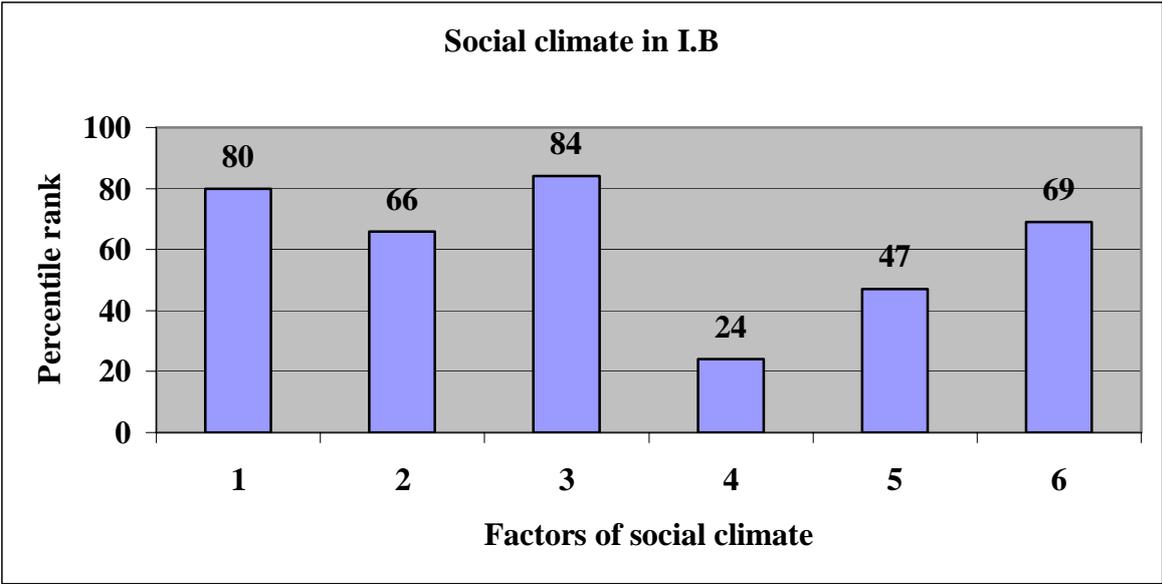


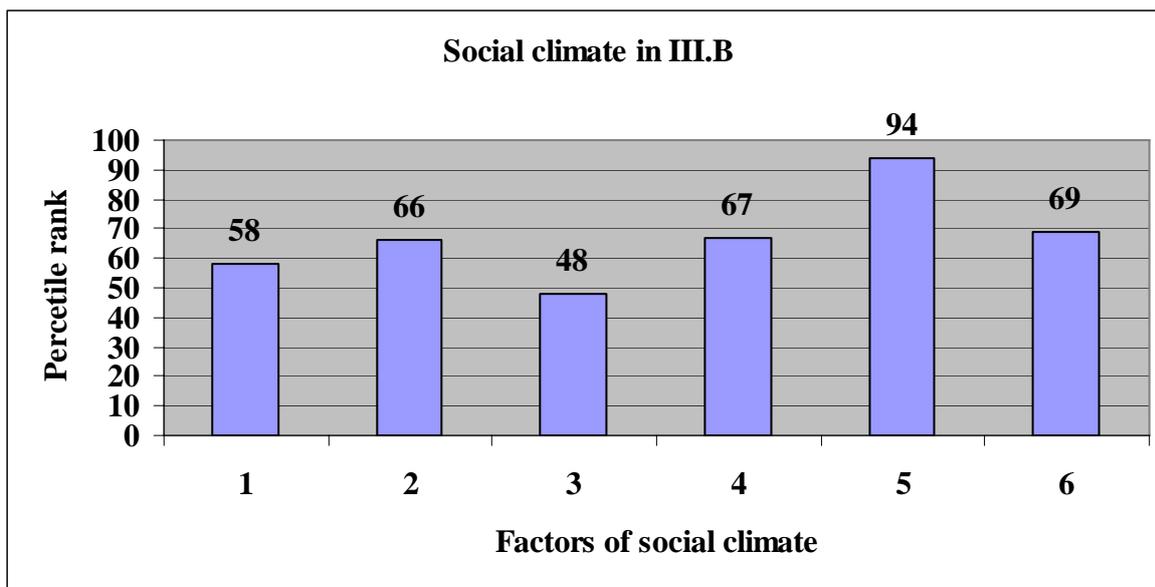
In the last variable relating to rule clarity (Graph 6), all classes reached the value of 69, i.e. they are among 31% of the best classes. The situation is above average and highly favourable. In questions focused on the teacher, e.g. CES questions no.18, 23, etc. students were asked to assess the approach of their class teacher. As shown by the following graph, the work of the class teacher is very good.

**Graphic summary of research results**

**Graph 7 – 10 General overview of six variables in individual classes**







The research was focused on social climate in classrooms at the secondary technical school in Hořovice and evaluation of this climate using six variables. Based on the assessment of the achieved results it can be concluded what is the situation in individual classes, highlight the factors that achieved low values and suggest tools and methods for their improvement. As concerns individual results obtained at the secondary technical school in Hořovice, the lowest values were achieved in variables relating to the students' task orientation and involvement in the teaching-learning process. Therefore it is necessary in the classrooms with the lowest values to focus on increasing the students' motivation, discussions with them and increasing their involvement in the instruction. Above average results were achieved in the rule clarity and teacher support. Based on this fact it may be concluded that most students trust their class teacher and the rules set by him/ her are clear.

As stated by R. Chávez (1984), there may coexist various social climates in one school, which has been proved also by this research.

Although validity of studies of classroom climate and of the resulting characteristics of the school can be questioned for many reasons, the use of climate in counselling is useful for the treatment of various issues relating to the school, such as students' or teachers' performance, innovation efforts, school evaluation. The skill to reflect the school environment is much more valuable than a strictly defined portrait of the school.

Study of the school climate may be qualitative or quantitative. It may use participant observation of the school climate, interviews about school events, analysis of various episodes and statements. Much more frequently used are different questionnaires and assessment scales, including sociometric techniques. However, these methods are not used individually. It is recommended to use them in combination and thus to make them more objective. Although the study of school climate is still the task of researchers, in future it would be desirable to acquaint with is also school teachers and principals as it may help them to get a better insight into the life of the school, its activities, influence and significance and to learn how to evaluate their functions. On the basis of the research they may find out not only what is the school climate and what effect it has, but also what are the factors that contribute to it.

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